Book reviews 637

would strongly recommend. I think it should be in all medical libraries as well as in all departmental libraries in cardiology units. Quite apart from this, it is useful reading for all cardiologists, and certainly required reading for any who espouse an interest in cardiac electrophysiology.

DENNIS KRIKLER

Geriatric cardiology Edited by David T Lowenthal (Pp 263; £54.) London: Williams and Wilkins, 1992. ISBN 080365 6534

This short book, one of the Cardiovascular Clinic Series, brings another contribution to the burgeoning field of old age cardiology. Elderly patients with heart disease present special diagnostic and treatment challenges, because other vital organs may exhibit changes associated with ageing, wear and tear, and often disease. Some diseases occur only in old age: senile cardiac amyloidosis and conduction system degeneration to name but two. Lifestyle, socioeconomic and quality of life considerations often play a more important part in therapeutic decision-making in older people than they do in the young, and cardiologists need to have a grasp of some of the more important principles of geriatric medicine if they are to treat their elderly patients optimally.

Geriatric Cardiology is principally written by American cardiologists with some contributions by those from other disciplines. It is divided into four sections: epidemiology and clinical, therapy, and socioeconomic considerations.

The first section has a good short review of demography in the United States and a summary of the risk factors for cardiovascular disease by Dr Kannel in his usual inimitable style. The description of the ageing process in the heart is short but reasonably comprehensive and well-illustrated by line drawings, graphs, and tables in the second section.

In the third section the chapter on hypertension addresses the difficult problems that are encountered in evaluating the need for treatment in elderly people, but does not give any clear guidelines about treatment regimens. It seems to underestimate the importance of angiotensin converting enzymes in relation to calcium channel and  $\beta$  blockers in this age group.

The chapter on myocardial infarction emphasises the significance of this condition when it occurs without pain and quotes extensively from Pathy's work. However, those of us who deal extensively with acute geriatric emergencies are usually rather less impressed by the apparent absence of chest pain as one of the main presenting symptoms of acute myocardial infarction. There is a lack of balanced reports on the presentation of this condition in elderly people. It may well remain so while developed countries adopt such widely differing and disintegrated ways

of managing acute medical emergencies in elderly people.

Valvar heart disease, cardiomyopathies, pericarditis and heart failure are well documented and there are excellent reviews on these subjects. The chapter on arrhythmias is reasonably comprehensive, although the effectiveness of permanent cardioversion in atrial fibrillation, by chemical or electrical means, is overemphasised. There is no discussion of the potential dangers of atrial fibrillation as far as thromboembolism is concerned. A more comprehensive discussion on the indications for, and type of, permanent pacemakers would have been welcome.

The chapters on drug therapy, intervention therapy for coronary heart disease, and cardiac surgery are well balanced and comprehensive. They reflect the increasingly aggressive line that physicians should adopt towards coronary and valvar diseases in elderly patients when they uncomplicated by other significant ageing processes or disease. The chapter on rehabilitation and lifestyle modification is excellent and underlines the growing enthusiasm in this area—one about which we shall doubtless hear much more in the future.

The final section has two chapters on socioeconomic and ethical considerations and these are welcome in any modern text. They given considered reviews-albeit with a North American perspective—of problems that are rightly attaining ever greater prominence in the health care systems of developed countries. Perhaps is is nit picking to highlight the sudden appearance in the final stages of the text of the word "elders' when previously they had been "elderly" "old people", or "the aged", but this is one of the disadvantages of a multi-authored book in which 95% of the contributors are physicians.

Generally Geriatric Cardiology is a welcome contribution to books on heart disease in old age. It is also well presented, illustrated, referenced, and indexed and thus deserves a place on the bookshelves of all British hospital libraries, but priced at £54.00 few doctors are likely to buy it themselves.

ANTHONY MARTIN

A primer of molecular biology. R Roberts, J Towbin, T Parker, R G Biers. (Pp202; \$49) New York: Elsevier, 1992. ISBN 0444 01657-0.

Few would argue against the view that the techniques now available in molecular biology have, and will continue, to advance our understanding of human cardiac disease. Most practising cardiologists have come to terms with the production of therapeutic substances such as plasminogen activator by recombinant DNA technology. Molecular biology has far more to offer in terms of diagnosis and understanding the basic

mechanisms of disease. These aspects require a deeper knowledge of the principles of the technology, which are not always easy to acquire by those who do not practise the trade of molecular biology. Few clinicians will be totally conversant with northern, western and Southern blots and even the meaning of a lod score is not immediately obvious.

This primer first aims to bridge this gulf and then sets out to show how the techniques have been used to give an understanding of mechanisms in cardiac disease.

The first objective has been achieved extremely well. The role of nucleic acids and genes in the synthesis of proteins is well explained and illustrated by numerous line diagrams. Those who wish to know what Southern blots are will find the technique clearly explained and illustrated. There are lucid sections on the essentials of molecular genetics, the concepts of linkage and lod scores, and restriction fragment mapping in the isolation of genes.

The second objective of the book, to show how these techniques have been used, is less successful largely because it is incomplete. What is there is done well. There are chapters on the molecular biology of contractile filaments, myocyte growth and hypertrophy, and myocyte ion channels. Even within these sections, however, the clinician will find little help in understanding how the clinical picture is produced. Put another way, in the terminology of molecular biology, there is little discussion of the link between genotype and phenotype. For example, the abnormalities of heavy chain myosin are described but not how these might cause the disease of hypertrophic cardiomyopathy.

There are notable omissions. For example, there is no discussion of the genetic abnormalities of lipid metabolism or of connective tissue synthesis, thus familial hypercholesterolaemia and Marfan disease are not mentioned.

The authors no doubt believe, with some justification, that if the book were comprehensive in this regard it would be larger and more expensive.

For those who wish to understand the basic technology of molecular biology and to have some examples of its use, this book is an option. There are competitors in this market and potential readers should look around—but this book is both effective and relatively chean

MJ DAVIES

The title reviewed here is available from the BMJ Bookshop, PO Box 295, London WC1H 9TE. Prices include postage in the UK and for members of the British Forces Overseas, but overseas customers should add £2 per item for postage and packing. Payment can be made by cheque in sterling drawn on a UK bank, or by credit card (MasterCard, VISA, or American Express) stating card number, expiry date, and your full name.

## **NOTICE**

The 1993 Annual Meeting of the **British** Cardiac Society will take place at the Wembley Conference Centre from 18 to 21 May.